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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _2/5/2010_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-20_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All b)☐ Some * c)☐ None of:
   1.☐ Certified copies of the priority documents have been received.
   2.☐ Certified copies of the priority documents have been received in Application No. _____.
   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Claim Status

1.   Claims 1-20 are pending.

Claim Objections

2.   Claim 19 is objected to because of the following informalities: Claim 19 appears to have

a typo. Claim 19 states "code to perform a network analysis on a search results and to display

the search result" it appears the 's' in the phrase "a search results" should be removed.

Appropriate correction is required.

35 USC § 101 Comment

3.   Regarding claim 19, this claim recites "computer-readable media". In the absence of any

other modifying disclosure of this limitation in the specification, the Examiner interprets the

'computer-readable media' as being limited to statutory embodiments, only such that it satisfies

the terms of 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

5.   **Claims 1, 4-7, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by**

U.S. Patent Application Publication 2003/0004936 by Grune et. al. (hereafter Grune).

Claim 1:

Grune discloses:

A computer-implemented method for mapping intellectual property [Grune, 0010, search

and map patents.], comprising:

Searching (searching) one or more remote databases (databases) for one or more relevant

patents [Grune, 0027, allows a user to enter a query via a client computer that is connected to a

server on a global area network. Intelligent searching also provides a user access to the stored

intellectual property and scientific information contained on various databases.]; and

performing a network analysis (map) on the relevant patents [Grune, [0048] that the

program can be used to map patent citations or patent claims in hyperbolic tree formats] and

displaying one or more patents (intellectual property)[Grune, [0048] The program allows for

simultaneous modeling of the valuation and intellectual property results. The results may be

displayed in various graphical formats.].

Claim 4:

Grune discloses the method of claim 1, further comprising clusterizing (grouping/indexing)

patents according to word (subject/noun/verb/adjective) similarity (related/according

to/synonym) [Grune, 0011, intelligent searching engine will access and retrieve information from

the databases of knowledge management, valuation, IP, and technology literature. After

information related to query is retrieved, data is sent to SIPS-VSM's utilities. One of the utilities

will group results according to subject, publication date, assignee, etc. Knowledge management

utility enables users to find solutions to problems by semantically analyzing documents by

breaking sentences into noun-verb-adjective trees and then applying such tools as synonym

indexes.].

Claim 5:

Grune discloses the method of claim 1, further comprising generating a visualization of the

patents (visual results) for display on a screen (screen) or plotting on a large format plotter

[Grune, 0060, visual results are displayed in split or full-screen format.].

Claim 6:

Grune discloses the method of claim 1, further comprising three-dimensionally visualizing the

patents on a 3D display device [Grune, 0010, model the results of the query in such a way that a

user may display and/or map (by an audio/visual means in two or three dimensions); must be

able to display in 3D if visual means is displayed in 3D.].

Claim 7:

Grune discloses the method of claim 1, further comprising allowing a user to review (review) the

search result and revise the query (refine query) [Grune, 0023, allows user to review information

and extracted pertinent information. Grune 0014, refine query.].

Claim 16:

Grune discloses a system for mapping intellectual property, comprising:

   means for Searching (searching) one or more remote databases (databases) for one or

more relevant patents [Grune, 0027, allows a user to enter a query via a client computer that is

connected to a server on a global area network. Intelligent searching also provides a user access

to the stored intellectual property and scientific information contained on various databases.];

and

      means for performing a network analysis (map) on the relevant patents [Grune, [0048]

that the program can be used to map patent citations or patent claims in hyperbolic tree formats]

and displaying one or more patents (intellectual property)[Grune, [0048] The program allows for

simultaneous modeling of the valuation and intellectual property results. The results may be

displayed in various graphical formats.].

Claim 17:

Grune discloses the system of claim 16, further comprising means for generating a computer-

readable intellectual property mapping file (resulting file) [Grune, 0048, maps patent citations

into hyperbolic formats. 0014, resulting file.].

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

7.   **Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent**

Application Publication 2003/0004936 by Grune et. al. (hereafter Grune) further in view

of "H3: Laying Out Large Directed Graphs in 3D Hyperbolic Space" by Tamara Munzner

(hereafter Munzner)

Claim 3:

The method of claim 1, further comprising:

Grune does not explicitly disclose for each patent, creating spring relationship among patents based on number of citation of patent prior art; and generating a spring mass diagram. On the other hand, Munzner, page 6, discloses iterative force-directed placement systems that models (generates) nodes and links as a mass-spring system (spring mass/spring relationship between nodes), where nodes repulse each other but links exert an attractive force. Further disclosing that while these iterative systems do well with relatively small graphs they have difficulty converging when the number of nodes (based on number of nodes) scales from hundreds to thousands. Grune and Munzner both disclose a system to visualize data. It would have been obvious to one of ordinary skill at the time the invention was made to have modified Grune to have included the step of for each patent, creating spring relationship among patents based on number of citation of patent prior art; and generating a spring mass diagram based on the disclosure of Munzner for the purpose of visualizing data in a much more efficient manner by providing spring mass relationships between the display data.

8.   Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0004936 by Grune et. al. (hereafter Grune) further in view of U.S. Patent 6339767 by Rivette et. al. (hereafter Rivette).

Claim 8:

The method of claim 1, further comprising caching results from prior IP maps in a remote computer

Grune does not explicitly disclose caching results from prior IP maps in a remote computer alone. However Grune does disclose 0014 that the system displays the results in the resulting files in an audio/visual format, and the user may save or print the result files generated by the query (results of IP maps). On the other hand Rivette, c. 55 1.30-55 discloses a caching subsystem that caches/retrieves cached patent data (caching IP data in a remote computer). Both Grune and Rivette disclose a system involving patent display systems. It would have been obvious to one of ordinary skill at the time the invention was made to have included the step of caching results from prior IP maps in a remote computer based on the disclosure of Rivette. One of ordinary skill in the art would have been motivated to do so for the purpose of quickly accessing frequently used data.

Claim 9:

The method of claim 8, further comprising retrieving (retrieval) a cached IP map in response to a user request (request) [Rivette, c.54 1. 17,/'etrieval request is sent to cached Subsystem]

Claim 10:

As to claim 10, Grune discloses IP maps and fresh IP maps [Grune, 0014, user is able to create new search, thus a new map.].

Grune however does not explicitly disclose periodically flushing cached data to ensure a fresh data.

Rivette on the other hand, disclosed col. 53 line 28-29, caching only takes place in network client 306. In col. 54 line 12-14, in other embodiments, the client 304, 306 discards unused data received from the enterprises server 314 in order to make room for additional data. Accordingly, cache flushing (discarding data) is suggested by Rivette.

Both Grune and Rivette disclose a system involving patent display systems. It would have been obvious to one of ordinary skill at the time the invention was made to have applied Rivette's disclosure of discarding unused data to Grune's system for the purpose of making room for additional and more

frequently used data to be utilized. Accordingly, one of ordinary skill in the art would have been motivated

to do so for the purpose of quickly accessing frequently used and updated data.

9.   **Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent**

Application Publication 2003/0004936 by Grune et. al. (hereafter Grune) further in view of

U.S. Patent Application Publication 2004/0123235 by Yeh et. al. (hereafter Yeh).

<u>Claim 18:</u>

Grune discloses links generated by a network analysis of relationships among the patent

documents [Grune discloses [0048] that the program can be used to map patent citations or

patent claims in hyperbolic tree formats (links generated by a network analysis relationship

among patents).] Grune does not explicitly disclose a collection of patent documents, each

having one or more links embedded in the first portion referencing one or more external

documents viewable using a viewer application; and one or more links embedded in the third

portion referencing information contained in the second portion. Yeh discloses a 0045 a patent

citation tree generated in accordance with data stored in the patent information table (referencing

external documents). The citation analyzing module generates citation links among a plurality of

patents (each having one or more links embedded in the first portion referencing one or more

external documents a collection of patent documents) according to the summary data stored in

the patent information table (one or more links embedded in the third portion referencing

information contained in second portion). The link generating module generates sub-node links

between the nodes, and adds sub-node links to the node data structure. Each sub-node link

represents one or more citation links, and connects one node with it's respective one or more

nodes. Yeh further discloses, 0048, that the node link structures are displayed in hyperbolic plane

in the display unit (viewer application). Grune and Yeh are related to database manipulation as

well as patent systems. They are therefore analogous. It would have been obvious to a person of

an ordinary skill in the art at the time the invention was made to have included the steps of Yeh

above to the steps of Grune for the purpose of assisting the user to analyze develop the trends

and directions of technology.

10.   Claims 1, 3-5, 8-11, 13, and 16-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent 20050010559 by Du et. al. (hereafter Du) further in view of

U.S. Patent 6339767 by Rivette et. al. (hereafter Rivette).

<u>Claim 1 :</u>

Du discloses

        "a computer-implemented method for mapping intellectual property" [Du discloses,

figure 8 elements 840-850. Accordingly, a computer-implemented method for mapping (figure 8

elements 840-850, search; 0042, located) intellectual property (patents)]

        "searching one or more remote databases for one or more relevant patents; and"[Du

discloses, figure 8 element 840, search patent databases to collect target patents. Accordingly,

searching one or more remote databases (search patent databases)for one or more relevant

patents (to collect target patents)]

        "performing a network analysis on the relevant patents" [Du discloses, figure 8 element

850 and 0042 lines 15-17 patent databases are searched again to collect reference patents that are

cited by target patents. Accordingly, performing a network (figure 1) analysis (search patent

databases) on the relevant patents (target patents)]

"and displaying" [Du discloses, 0021, in addition to the specified web sites, the user can also request to search some specific databases and other network resources. Du discloses, 0025, a combined search result is then presented to the user. Du discloses, figure 8 element 850, search patent databases to collect reference patents. Du discloses, 0042 lines 15-17, patent databases are searched again to collect reference patents that are cited by target patents. Figure 4 citation search method. Du discloses, 0034, a citation list is produced. In one embodiment the citation list comprises owners, patent numbers, titles, and issued dates of the first tier reference patents. Accordingly, displaying (citation list is produced/search result is then presented to user)]

Du does not explicitly disclose displaying "one or more patents"

On the other hand, Rivette discloses displaying "one or more patents" [Rivette, figure 65]

Both Rivette and Du are directed towards patent search systems. Du produces citation lists as well as presents search results (see Du 0034 and 0025). Rivette more explicitly discloses that a display of patents is provided as seen in figure 65. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Rivette's disclosure above to the disclosure of Du for the purpose of providing a more explicit display of how the patents and cited patents are related rather than just a generic list.

Claim 3 :

Du does not explicitly disclose:

"for each patent, creating spring relationship among patents based on number of citation of patent prior art; and"

"generating a spring mass diagram."

On the other hand, Rivette discloses

"for each patent, creating spring relationship among patents based on number of citation of patent prior art; and"[Rivette, figure 65. Rivette, col. 88 lines 65- col. 89 line 14. Accordingly, for each patent (patent), creating spring relationship (figure 65, citation) among patents (patents 1-12) based on number of citation of patent prior art (patent 1 cites patents 2-4)]

"generating a spring mass diagram." [Rivette, figure 65. Accordingly, generating a spring (citation) mass (patent) diagram (display)]

Both Rivette and Du are directed towards patent search systems. Du produces citation lists as well as presents search results (see Du 0034 and 0025). Rivette more explicitly discloses that a display of patents is provided as seen in figure 65. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Rivette's disclosure above to the disclosure of Du for the purpose of providing a more explicit display of how the patents and cited patents are related rather than just a generic list.

Claim 4 :

 Du does not explicitly disclose "clusterizing patents according to word similarity."

On the other hand, Rivette discloses "clusterizing patents according to word similarity." [Rivette, col. 92 lines 2-6, clustering/bracketing module in the enterprise server operates to identify and graphically represent potential relationships between a source patent and citing patents, where the citing patents are either cited in the source patent or cite the source patent. Rivette, col. 92 lines 31-34, patent clustering/bracketing module identifies the ownership of the source patent

and the ownership of the citing patents by reference to the assignee table and/or the

core_patent_xref table. Accordingly, clusterizing (cluster/)patents (patent/reference) according

to word similarity (assignee/owner).] Both Rivette and Du are directed towards patent search

systems. Du produces citation lists as well as presents search results (see Du 0034 and 0025).

Rivette more explicitly discloses that a display of patents is provided as seen in figure 65. It

would have been obvious to a person of an ordinary skill in the art at the time the invention was

made to have applied Rivette's disclosure above to the disclosure of Du for the purpose of

providing a more explicit display of how the patents and cited patents are related rather than just

a generic list.

Claim 5 :

Du does not explicitly disclose "generating a visualization of the patents for display on a screen

or plotting on a large format plotter." On the other hand, Rivette discloses "generating a

visualization of the patents for display on a screen or plotting on a large format plotter." [Rivette,

figure 65, and col. 89 lines 4-5, patent citation report fig. 65 is multi-leveled. Accordingly,

generating a visualization of the patents (figure 65, patents 1-12) for display on a screen or

plotting on a large format plotter (display).] Both Rivette and Du are directed towards patent

search systems. Du produces citation lists as well as presents search results (see Du 0034 and

0025). Rivette more explicitly discloses that a display of patents is provided as seen in figure 65.

It would have been obvious to a person of an ordinary skill in the art at the time the invention

was made to have applied Rivette's disclosure above to the disclosure of Du for the purpose of

providing a more explicit display of how the patents and cited patents are related rather than just

a generic list.

Claim 8 :

Du does not explicitly disclose "caching results from prior IP maps in a remote computer." On

the other hand Rivette discloses "caching results from prior IP maps in a remote computer."

[Rivette, col. 53, lines 20-23, the caching subsystem of the broker layer provides a means for

objects to be cached on the client after they have been retrieved from the enterprise server (col.

55 lines 30-55); the caching subsystem sends requests to the enterprise server to retrieve

additional patent data for display in the second panel. When responding to such requests

involving the console, the enterprise server preferably returns patent data representative of a

plurality of patents. Specifically, the enterprise server returns data representative of a patent

cluster. Accordingly, caching results from prior IP maps (patent data) in a remote computer

(server).] Both Rivette and Du are directed to search systems and patent data citations. They are

therefore analogous to applicant's invention. It would have been obvious to a person of an

ordinary skill in the art at the time the invention was made to have applied Rivette's disclosure

above to the disclosure of Du for the purpose of retrieving results faster for a request being made.

In storing the patent data in a cache, requests that have been made recently would be rendered

quicker.

Claim 9 :

Du does not explicitly disclose "retrieving a cached IP map in response to a user request." On the

other hand Rivette discloses "retrieving a cached IP map in response to a user request."[Rivette,

col. 53 lines 40-45, Cache subsystem receives a request for data from a requester. This data request is described herein as being a request for patent data, accordingly, retrieving a cached IP map (patent data) in response to a user request (requester).]. Both Rivette and Du are directed to search systems and patent data citations. They are therefore analogous to applicant's invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Rivette's disclosure above to the disclosure of Du for the purpose of retrieving results faster for a request being made. In storing the patent data in a cache, requests that have been made recently would be rendered quicker.

Claim 10 :

Du does not explicitly disclose "periodically flushing cached IP maps to ensure a fresh IP map." On the other hand, Rivette discloses "periodically flushing cached IP maps to ensure a fresh IP map." [Rivette, col. 53 lines 23-26, the caching subsystem enables the client to manage an infinite number of objects obtained from the enterprise server by only storing those objects that have been most recently used. Accordingly, periodically flushing cached IP maps to ensure a fresh IP map (only storing those objects that have been most recently used.)] Both Rivette and Du are directed to search systems and patent data citations. They are therefore analogous to applicant's invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Rivette's disclosure above to the disclosure of Du for the purpose of retrieving results faster for a request being made. In storing the patent data in a cache, requests that have been made recently would be rendered quicker.

Claim 11 :

The combination of Du and Rivette disclose in Du "distributing a search over a plurality of client

computers."[Du, see figure 1.]

Claim 13 :

Du does not explicitly disclose "annotating a patent at a local computer and caching the

annotated patent at a remote computer to satisfy a subsequent request for said patent." On the

other hand, Rivette discloses "annotating a patent at a local computer and caching the annotated

patent at a remote computer to satisfy a subsequent request for said patent."[Rivette, col. 14 lines

47-51, these clients 304, 306 pursuant to instructions from human operators or users, interact

with the enterprise server to access and process the information in the databases. Rivette, Col.

19 lines 58-61, more particularly, the present invention allows users to create and link

annotations (also called notes) to any portions of the documents in the document databases 612.

Rivette, Figure 3. Rivette, col. 3 lines 5-9, the SmartPatent Workbench has functions to annotate

patents with any information whether or not patent related and has additional functions to search

within annotations. Accordingly, annotating a patent (annotations to any portions of documents)

at a local computer (figure 3 element 304, 306) and caching the annotated patent at a remote

computer (figure 3 element 316) to satisfy a subsequent request (col. 3 lines 5-9, search

annotations) for said patent (col. 3 lines 5-9, patent).] Both Du and Rivette are directed to patent

search systems and further disclose methods of identifying citations of patents. They are

therefore analogous and within the same field of endeavor as applicant's invention. Du discloses

methods of discovering related patents by providing for example a notice of cited patents (see

0042). Rivette discloses to annotate documents to provide notes in the form of annotations about patents. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Rivette's disclosure above to the disclosure of Du for the purpose of sending a manager a better notes about a specific patent when a notice is generated.

Claim 16 :

Du discloses

"a computer-implemented system for mapping intellectual property" [Du, figure 8 elements 840-850. Accordingly, a computer-implemented system for mapping (figure 8 elements 840-850, search; 0042, located) intellectual property (patents)]

"means for searching one or more remote databases for one or more relevant patents; and"[Du, figure 8 element 840, search patent databases to collect target patents. Accordingly, means for searching one or more remote databases (search patent databases)for one or more relevant patents (to collect target patents)]

"performing a network analysis on the relevant patents" [Du, figure 8 element 850 and 0042 lines 15-17 patent databases are searched again to collect reference patents that are cited by target patents. Accordingly, means for performing a network (figure 1) analysis (search patent databases) on the relevant patents (target patents)]

"and displaying" [Du, 0021, in addition to the specified web sites, the user can also request to search some specific databases and other network resources. Du, 0025, a combined search result is then presented to the user. Du, figure 8 element 850, search patent databases to collect reference patents. Du, 0042 lines 15-17, patent databases are searched again to collect reference patents that are cited by target patents. Du, Figure 4 citation search method. Du, 0034,

a citation list is produced. In one embodiment the citation list comprises owners, patent

numbers, titles, and issued dates of the first tier reference patents. Accordingly, displaying

(citation list is produced/search result is then presented to user)]

Du does not explicitly disclose displaying "one or more patents"

On the other hand, Rivette discloses more explicitly "displaying on or more patents"

[Rivette, figure 65]

Both Rivette and Du are directed towards patent search systems. Du produces citation

lists as well as presents search results (see Du 0034 and 0025). Rivette more explicitly discloses

that a display of patents is provided as seen in figure 65. It would have been obvious to a person

of an ordinary skill in the art at the time the invention was made to have applied Rivette's

disclosure above to the disclosure of Du for the purpose of providing a more explicit display of

how the patents and cited patents are related rather than just a generic list.

Claim 17 :

The combination of Du and Rivette disclose in Rivette "means for generating a computer-

readable intellectual property mapping file."[Rivette, col. 55 lines 30-55, the caching subsystem

sends requests to the enterprise server to retrieve additional patent data for display in the second

panel. When responding to such requests involving the console, the enterprise server preferably

returns patent data representative of a plurality of patents. Specifically, the enterprise server

returns data representative of a patent cluster. Accordingly, "means for generating a computer-

readable intellectual property mapping file (data representative of a patent cluster)]

Claim 18 :

The combination of Du and Rivette disclose in Rivette "wherein the IP mapping file comprises:

a collection of patent documents, each having one or more links embedded in the first portion

referencing one or more external documents viewable using a viewer application; and one or

more links embedded in the third portion referencing information contained in the second

portion"[Rivette, Figures 71-73, are examples of patent clustering/bracketing display formats.

Col. 92 lines 51-56, In the display format 7102, links 7148 are used to represent the relationship

between the source patent and the citing patent. In particular links indicate that the citing

patterns were cited during the prosecution of the source patent. Rivette, col. 55 lines 30-55, the

caching subsystem sends requests to the enterprise server to retrieve additional patent data for

display in the second panel. When responding to such requests involving the console, the

enterprise server preferably returns patent data representative of a plurality of patents.

Specifically, the enterprise server returns data representative of a patent cluster. A patent cluster

represents a given number of patents. Accordingly, wherein the IP mapping file (col. 55 line 36-

38, data representative of a patent cluster) comprises: a collection of patent documents (col. 55

line 39, given number of patents), each (figures 71elements 7104, figure 72 element 7204, and

figure 73 element 7304) having one or more links embedded in the first portion referencing one

or more external documents (figure 71 element 7148, links) viewable using a viewer application

(figure 71 element); and one or more links embedded in the third portion (figure 73 element

7308) referencing information contained in the second portion (figure 73 element 7306)] "; and

links generated by a network analysis of relationships among the patent documents."[figure 71-

73. Col. 92 lines 51-56, In the display format 7102, links 7148 are used to represent the

relationship between the source patent and the citing patent. In particular links indicate that the

citing patterns were cited during the prosecution of the source patent. Accordingly, links

generated by a network analysis of relationships (relationship) among the patent documents

(source/cited patent)]

11.   Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent

20050010559 by Du et. al. (hereafter Du) further in view of U.S. Patent 6339767 by Rivette

et. al. (hereafter Rivette), U.S. Patent 6947930 by Anick et. al. hereafter (Anick), and "The

Paraphrase Search Assistant: terminological Feedback for Iterative Information Seeking"

by Anick et. al. (hereafter Anick 2).

Claim 2 :

The combination of Du and Rivette disclose in Du the following claimed limitations:

        "receiving as a query one or more keywords or assignees to be searched;" [Du, figure 8

element 810, receive a search query.]

        "searching the query in Issued Patent or Published Application databases;" [Du, figure 8

element 840, search patent databases to collect target patents. Du, 0042 lines 10-13, patent

databases are searched to collect target patents both satisfying conditions of the search query and

whose owners match at least one entity set forth in the watch list. Accordingly, searching the

query (0042, query) in Issued Patent or Published applications (0042, patent databases)]

"retrieving cited prior art patents for each patent found in search results;" [Du, figure 8 element 850, search patent databases to collect reference patents. Du, 0042 lines 15-17, patent databases are searched again to collect reference patents that are cited by target patents. Accordingly, retrieving cited prior art (0042, reference patents that are cited) for each patent found as search results (target patents)]

"cited prior art" [Du, 0042, reference patents that are cited]

The combination of Du and Rivette does not explicitly disclose:

"updating the query by adding" terms "from the" documents "; and"

"running a second search using the updated query"

On the other hand, Anick discloses

"updating the query by adding" terms "from the" documents [Anick, See figure 6 elements 614, if a user selects a term in the subset of candidate terms repeat the processing, selecting and presenting with a revised query that includes the received query and the Selected candidate term from the subset of candidate terms. See figure 6 element 610, a subset of candidate terms that are in one or more of the respective sets of ranked candidate terms that are associated with documents in the initial group of ranked documents. Accordingly, updating the query (figure 6 element 614, revised query) by adding terms (figure 6 element 610, terms) from the documents (figure 6 element 610, documents)]

"running a second search using the updated query" [Anick, col. 19 lines 21-22, the processing, selecting, and presenting are repeated with a revised query that includes the original query and the selected candidate term from the subset of candidate terms. Accordingly, running a second search (repeated) using the updated query (revised query)]

Du discloses a search of target patents as well as reference patents, see figure 8. Rivette

discloses a search for patents as well.   Anick discloses a query refinement method in which

extracted terms are taken from a searched document and then those terms are to be used to

update the query see figure 6. Du, Rivette, and Anick are directed to search systems. Du and

Rivette do not explicitly extract terms from the searched documents in order to update the query.

Anick discloses updating the query and repeating the steps of searching and obtaining more

search terms via the searched documents. It would have been obvious to a person of an ordinary

skill in the art at the time the invention was made to have applied the disclosure of Anick above

to the combination of Du and Rivette for the purpose of providing a query refinement method for

subsequent searches. Doing so would provide a better search for patent information to both Du

and Rivette's system.

The combination of Du, Rivette, and Anick do not expressly disclose the use of "adding

assignee" in relation to updating the query per se. Anick only broadly discloses this since an

extracted term from a document can be an assignee from a document.

On the other hand, Anick 2 more explicitly discloses the use of "adding assignee" in relation to

updating the query. See Paragraphs 24-25 facets are determined for a query by extracting terms

from result lists. See Paragraphs 28-30, the facet corporation includes patent assignees. See

Paragraph 38 and figure 2 of Anick 2, a selection of a facet value. Anick 2 further discloses

"adding assignee" to the query through the use of facets as seen in 0030 and figure 2 in order to further refine a query.

Du, Rivette, Anick and Anick 2 are all directed towards search systems and are therefore analogous. Du is directed to a target and reference patent search system. Rivette is also directed to a search system. Anick is directed to query refinement however does not expressly disclose extracting the Assignee data per se. Anick 2 more expressly discloses a query refinement method that utilizes Assignee data as seen in paragraph 30. Anick 2 therefore discloses using the assignees (patent assignees, Anick 2 paragraph 30) from cited prior art (patent abstracts, Anick 2 paragraph 28) in order to update the query (paragraph 38 and figure 2) as can be seen in a published by Anick 2. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Anick 2 to the combination of Du and Anick for the purpose of obtaining assignees from patent documents and using the assignee data to update the query as seen in paragraph 0030 and figure 2 of Anick 2.

12.   **Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 20050010559 by Du et. al. (hereafter Du) further in view of U.S. Patent 6339767 by Rivette et. al. (hereafter Rivette) and U.S. Patent Application Publication 20030004936 by Grune et. al. (hereafter Grune)**

Claim 6 :

Du and Rivette do not explicitly disclose "three-dimensionally visualizing the patents on a 3D display device." On the other hand, Grune discloses "three-dimensionally visualizing the patents

on a 3D display device." [Grune, 0010, can search and map patents while simultaneously valuing

those patents....model the results of the query in such a way that a user may display and/or map

(by an audio/visual means in two or three dimensions). Solutions to such queries from patents

contained within specific evolving intellectual property databases, technological publications

contained within evolving scientific and engineering databases, and evolving knowledge

management based systems Accordingly, Grune discloses three-dimesnional visualizing the

patents (patents) on a 3D display (three dimensions).] Du, Rivette, and Grune are directed to

patent search systems. They are therefore analogous and within the same field of endeavor as

applicant's invention. It would have been obvious to a person of an ordinary skill at the time the

invention was made to have applied Grune's disclosure above to the combination of Du and

Rivette for the purpose of providing a better way to model the results for better display and

mapping between patent documents.

13.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent

20050010559 by Du et. al. (hereafter Du) further in view of U.S. Patent 6339767 by Rivette

et. al. (hereafter Rivette) and U.S. Patent 6947930 by Anick et. al. (hereafter Anick).

Claim 7 :

        Du and Rivette do not explicitly disclose "allowing a user to review the search result and

revise the query." On the other hand, Anick discloses "allowing a user to review the search result

and revise the query."[Anick, See figure 2. Accordingly, allowing a user to review the search

result (figure 2 element 142) and revise the query (figure 2 element 140)]. Du, Rivette, and

Anick are directed to search systems. They are therefore analogous to applicant's invention and

field of endeavor. Du discloses that a refinement to a query takes place (see 0023). Anick

however disclosed more clearly that the system provides a search result as well as allows the

system to revise the query as seen in figure 2. It would have been obvious to a person of an

ordinary skill in the art at the time the invention was made to have provided the disclosure of

Anick above to the combination of Du and Rivette for the purpose of allowing both refinement

and determination of results at the same time.

14.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent

20050010559 by Du et. al. (hereafter Du) further in view of U.S. Patent 6339767 by Rivette

et. al. (hereafter Rivette) and U.S. Patent 5778174 by Cain et. al. (hereafter Cain).

<u>Claim 12 :</u>

Du and Rivette do not explicitly disclose "wherein one of the client computers is located

behind a firewall, further comprising bypassing the firewall in sending distributed search results

to a remote computer." On the other hand, Cain discloses "wherein one of the client computers

is located behind a firewall, further comprising bypassing the firewall in sending distributed

search results to a remote computer."[Cain, See Figure 1 and col. 3 lines 59- col. 4 lines 1-2.

Accordingly, wherein one of the client computers (figure 1 element 20) is located behind a

firewall (figure 1 element 16), further comprising bypassing the firewall (figure 1 elements 30,

24, 26, 22, 28) in sending distributed search results(col. 3 line 65, response data) to a remote

computer (figure 1 element 22)]. Du, Rivette, and Cain disclose query and response systems.

Du discloses sending a query and designating certain databases to be searched however offers no

explicit firewall in providing results for a query. Rivette further allows for a search and request

system however also does not explicitly disclose a firewall. Cain discloses a query and response

system that allows for a query and response to bypass a firewall. It would have been obvious to

a person of an ordinary skill in the art at the time the invention was made to provide the

disclosure of Cain above to the disclosure of Du for the purpose of allowing for more secure

databases to be searched.

15.   **Claims 14-15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over U.S. Patent 20050010559 by Du et. al. (hereafter Du) further in view of U.S. Patent

6947930 by Anick et. al. hereafter (Anick), "The Paraphrase Search Assistant:

terminological Feedback for Iterative Information Seeking" by Anick et. al. (hereafter

Anick 2), and U.S. Patent 6339767 by Rivette et. al. (hereafter Rivette).

<u>Claim 14:</u>

Du discloses the following claimed limitations:

"a computer-implemented method for mapping intellectual property" [Du, figure 8

elements 840-850. Accordingly, a computer-implemented method for mapping (figure 8

elements 840-850, search; 0042, located) intellectual property (patents)]

"(a) receiving as a query one or more keywords or assignees to be searched;" [Du, figure

8 element 810, receive a search query.]

"(b) searching the query in Issued Patent or Published Application databases;"[Du, figure

8 element 840, search patent databases to collect target patents. Du, 0042 lines 10-13, patent

databases are searched to collect target patents both satisfying conditions of the search query and

whose owners match at least one entity set forth in the watch list. Accordingly, searching the

query (0042, query) in Issued Patent or Published applications (0042, patent databases)]

"(c) retrieving cited prior art for each patent found as search results;"[Du, figure 8

element 850, search patent databases to collect reference patents. Du, 0042 lines 15-17, patent

databases are searched again to collect reference patents that are cited by target patents.

Accordingly, retrieving cited prior art (0042, reference patents that are cited) for each patent

found as search results (target patents)]

"(f) displaying"[Du, figure 8 element 850, search patent databases to collect reference

patents. Du, 0025, a combined search result is then presented to the user. Du, 0042 lines 15-17,

patent databases are searched again to collect reference patents that are cited by target patents.

Du, figure 4 citation search method. Du, 0034, a citation list is produced. In one embodiment

the citation list comprises owners, patent numbers, titles, and issued dates of the first tier

reference patents. Accordingly, displaying (citation list is produced/search result is then

presented)]

"cited prior art" [Du, 0042, reference patents that are cited]

Du does not explicitly disclose:

"(d) updating the query by adding" terms "from the" documents;

"(e) iteratively repeating (b)-(d) using the updated query; and"

On the other hand, Anick discloses

"(d) updating the query by adding" terms "from the" documents [Anick, see figure 6

elements 614, if a user selects a term in the subset of candidate terms repeat the processing,

selecting and presenting with a revised query that includes the received query and the Selected

candidate term from the subset of candidate terms. Anick, see figure 6 element 610, a subset of candidate terms that are in one or more of the respective sets of ranked candidate terms that are associated with documents in the initial group of ranked documents. Accordingly, updating the query (figure 6 element 614, revised query) by adding terms (figure 6 element 610, terms) from the documents (figure 6 element 610, documents)]

"(e) iteratively repeating (b)-(d) using the updated query; and" [Anick, col. 19 lines 21-22, the processing, selecting, and presenting are repeated with a revised query that includes the original query and the selected candidate term from the subset of candidate terms. Accordingly, iteratively repeating (b) – (d) (processing, selecting, and presenting are repeated) using the updated query (revised query)]

Du discloses a search of target patents as well as reference patents, See figure 8. Anick discloses a query refinement method in which extracted terms are taken from a searched document and then those terms are to be used to update the query see figure 6. Both Du and Anick are directed to search systems. Du searching however does not explicitly disclose updating the query. Anick discloses updating the query and repeating the steps of searching and obtaining more search terms. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied the disclosure of Anick above to the disclosure of Du for the purpose of providing a query refinement method for subsequent searches. Doing so would provide a better search for patent information to Du's system.

The combination of Du and Anick does not expressly disclose the use of "adding assignee" in

relation to updating the query per se. Anick only broadly discloses this since an extracted term

from a document can be an assignee from a document.

On the other hand, Anick 2 more explicitly discloses the use of "adding assignee" in relation to

updating the query. See Paragraphs 24-25 facets are determined for a query by extracting terms

from result lists. See Paragraphs 28-30, the facet corporation includes patent assignees. See

Paragraph 38 and figure 2 of Anick 2, a selection of a facet value. Anick 2 further discloses

"adding assignee" to the query through the use of facets as seen in 0030 and figure 2 in order to

further refine a query.

Du, Anick and Anick 2 are all directed towards search systems and are therefore analogous. Du

is directed to a target and reference patent search system. Anick is directed to query refinement

however does not expressly disclose extracting the Assignee data per se. Anick 2 more expressly

discloses a query refinement method that utilizes Assignee data as seen in paragraph 30. Anick 2

therefore discloses using the assignees (patent assignees, Anick 2 paragraph 30) from cited prior

art (patent abstracts, Anick 2 paragraph 28) in order to update the query (paragraph 38 and figure

2) as can be seen in a published by Anick 2. It would have been obvious to a person of an

ordinary skill in the art at the time the invention was made to have applied the disclosure of

Anick 2 to the combination of Du and Anick for the purpose of obtaining assignees from patent

documents and using the assignee data to update the query as seen in paragraph 0030 and figure

2 of Anick 2.

Du, Anick, and Anick 2 do not explicitly disclose displaying "intellectual property" per se. However all disclose a display of documents.

On the other hand, Rivette discloses "displaying the intellectual property" [figure 65]

Both Du, Anick, Anick 2, and Rivette are all directed towards search systems. Anick is directed to query refinement however does not expressly disclose extracting the Assignee data per se. Anick 2 more expressly discloses a query refinement method that utilizes Assignee data as seen in paragraph 30. Du produces citation lists as well as presents search results (see Du 0034 and 0025). Rivette more explicitly discloses that a display of patents is provided as seen in figure 65. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Rivette's disclosure above to the combination of Du, Anick, and Anick 2 for the purpose of providing a more explicit display of how the patents and cited patents are related rather than just a generic list via Du.

Claim 15 :

The combination of Du, Anick, Anick 2, and Rivette further discloses in Du "network analyzing the search results." [Du, 0042 lines 15-17, patent databases are searched again to collect reference patents that are cited by target patents. Accordingly, network analyzing (collect reference patents) the search results (target patents)]

Claim 19 :

Du discloses the following claimed limitations:

"code to receive as a query one or more keywords or assignees to be searched" [Du,

figure 8 element 810, receive a search query.]

"code to search the query in Issued Patent or Published Application databases;" [Du,

figure 8 element 840, search patent databases to collect target patents. Du, 0042 lines 10-13,

patent databases are searched to collect target patents both satisfying conditions of the search

query and whose owners match at least one entity set forth in the watch list. Accordingly, code

to search the query (0042, query) in Issued Patent or Published applications (0042, patent

databases)]

"code to retrieve cited prior art patents for each patent found in search results;" [Du,

figure 8 element 850, search patent databases to collect reference patents. Du, 0042 lines 15-17,

patent databases are searched again to collect reference patents that are cited by target patents.

Accordingly, code to retrieve cited prior art (0042, reference patents that are cited) for each

patent found as search results (target patents)]

"code to perform a network analysis on a search results and to display the search

results"[Du, figure 8 element 850, search patent databases to collect reference patents. Du, 0042

lines 15-17, patent databases are searched again to collect reference patents that are cited by

target patents. Du, Figure 4 citation search method. Du, 0034, a citation list is produced. In one

embodiment the citation list comprises owners, patent numbers, titles, and issued dates of the

first tier reference patents. Accordingly, code to perform a network (figure 1) analysis (search

again) on a search results (patents) and to display (citation list is produced) the search result (first

tier reference patents).]

"cited prior art patents" [cited prior art patents (Du, 0042, reference patents that are cited)]

Du does not explicitly disclose:

"code to update the query by adding" terms "from the" documents

"code to run a second search using the updated query; and"

On the other hand, Anick discloses

"code to update the query by adding" terms "from the" documents [See Anick, figure 6 elements 614, if a user selects a term in the subset of candidate terms repeat the processing, selecting and presenting with a revised query that includes the received query and the Selected candidate term from the subset of candidate terms. See Anick, figure 6 element 610, a subset of candidate terms that are in one or more of the respective sets of ranked candidate terms that are associated with documents in the initial group of ranked documents. Accordingly, code to update the query (figure 6 element 614, revised query) by adding terms (figure 6 element 610, terms) from the documents (figure 6 element 610, documents)]

"code to run a second search using the updated query" [Anick, col. 19 lines 21-22, the processing, selecting, and presenting are repeated with a revised query that includes the original query and the selected candidate term from the subset of candidate terms. Accordingly, code to run a second search (processing, selecting, and presenting are repeated) using the updated query (revised query)]

Du discloses a search of target patents as well as reference patents, See figure 8. Anick discloses

a query refinement method in which extracted terms are taken from a searched document and

then those terms are to be used to update the query see figure 6. Both Du and Anick are directed

to search systems. Du searching however does not explicitly disclose updating the query. Anick

discloses updating the query and repeating the steps of searching and obtaining more search

terms. It would have been obvious to a person of an ordinary skill in the art at the time the

invention was made to have applied the disclosure of Anick above to the disclosure of Du for the

purpose of providing a query refinement method for subsequent searches. Doing so would

provide a better search for patent information to Du's system.

The combination of Du and Anick does not expressly disclose the use of "adding assignee" in

relation to updating the query per se. However, Anick broadly discloses this since an extracted

term from a document can be an assignee from a document.

On the other hand, Anick 2 more explicitly discloses the use of "adding assignee" in relation to

updating the query. See Paragraphs 24-25 facets are determined for a query by extracting terms

from result lists. See Paragraphs 28-30, the facet corporation includes patent assignees. See

Paragraph 38 and figure 2 of Anick 2, a selection of a facet value. Anick 2 further discloses

"adding assignee" to the query through the use of facets as seen in 0030 and figure 2 in order to

further refine a query.

Du, Anick and Anick 2 are all directed towards search systems and are therefore analogous. Du

is directed to a target and reference patent search system. Anick is directed to query refinement

however does not expressly disclose extracting the Assignee data per se. Anick 2 more expressly

discloses a query refinement method that utilizes Assignee data as seen in paragraph 30. Anick 2

therefore discloses using the assignees (patent assignees, Anick 2 paragraph 30) from cited prior

art (patent abstracts, Anick 2 paragraph 28) in order to update the query (paragraph 38 and figure

2) as can be seen in a published by Anick 2. It would have been obvious to a person of an

ordinary skill in the art at the time the invention was made to have applied the disclosure of

Anick 2 to the combination of Du and Anick for the purpose of obtaining assignees from patent

documents and using the assignee data to update the query as seen in paragraph 0030 and figure

2 of Anick 2.

    Du, Anick, and Anick 2 do not explicitly disclose that the displayed search results are

patents per se. However all disclose a display of documents after a search.

    On the other hand, Rivette discloses that the search results displayed are patents and thus

clearly discloses "displaying the search results" [Rivette, figure 65]

    Du, Anick, Anick 2, and Rivette are all directed towards search systems. Anick is

directed to query refinement however does not expressly disclose extracting the Assignee data

per se. Anick 2 more expressly discloses a query refinement method that utilizes Assignee data

as seen in paragraph 30. Du produces citation lists as well as presents search results (see Du

0034 and 0025). Rivette more explicitly discloses that a display of patents is provided as seen in

figure 65. It would have been obvious to a person of an ordinary skill in the art at the time the

invention was made to have applied Rivette's disclosure above to the combination of Du, Anick,

and Anick 2 for the purpose of providing a more explicit display of how the patents and cited

patents are related rather than just a generic list via Du.

Claim 20 :

The combination of Du, Anick, Anick 2, and Rivette further disclosing "code to distribute the

processing over a plurality of computers." [Rivette, Figure 1. Rivette, 0016, network resources.

Accordingly code to distribute the processing (figure 1) over a plurality of computers (0016,

network resources)]

Response to Arguments

16.   Applicant's arguments with respect to claims 1-20 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

17.   The prior art made of record listed on pto-892 and not relied, if any, upon is considered

pertinent to applicant's disclosure.

Contact Information

18.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MICHAEL PHAM whose telephone number is (571)272-3924.

The examiner can normally be reached on 9am-5pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. P./   /John R. Cottingham/
Examiner, Art Unit 2167   Supervisory Patent Examiner, Art Unit
                                                   2167

Approved by the TC Director:

/Jack Harvey/

Director, Technology Center 2100